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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/690,395 | 10/20/2003 | Dean H. Lodwig | 988-29-004 | 3755 |
| 826 | 7590 | 10/22/2004 | EXAMINER | |
| ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000 | | | FUNK, STEPHEN R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2854 | |

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,395

Applicant(s)

LODWIG ET AL.

Examiner

Stephen R Funk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46-53 is/are allowed.
- 6) ☒ Claim(s) 1-45 and 54 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/20/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claims 2 - 7, 10 - 15, and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 2 - 7 and 10 - 15 the recitations of the specific printer consumable and cleaning structure appear to be inconsistent with the scope of parent claims 1 and 9 drawn only to the printer. Parent claims 1 and 9 appear to only inferentially recite the replaceable cartridge by stating that the printer body is “configured to receive” the cartridge and that the cartridge is “receivable” in the printer body. Thus, the claims drawn to the specific structure of the cartridge render the scope of the claims indefinite since it is not clear whether or not applicant intends to claim only the printer or the printer in combination with a specific cartridge. For purposes of examination, claims 2 - 7 and 10 - 15 will be treated as positively reciting the specific cartridge in combination with the printer. However, it is applicant’s responsibility to clarify the scope of the claims and amend the claims consistent with that intention.

In claim 35 the recitation of the useful lives of the cleaning structure and printer consumable being commensurate is vague as such would depend on external factors such as the relative cleanliness or dirtiness of the substrates.

Claim 54 is objected to because of the following informalities:

In claim 54 lines 8 - 9 “said card-cleaning member” lacks proper antecedent basis.

Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 - 3, 5, 6, 8 - 11, 13, 14, 16 - 18, 21, 24, 28 - 30, 32, 33, 36 - 38, and 41 - 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Meier et al. (US 2004/0114981). Meier et al. teach a printer (100) having a print station (106) and a printer body configured to receive a replaceable cartridge (130) that holds a printer consumable (120) and a substrate cleaning structure (444).

With respect to claims 2, 8 - 10, and 29 see paragraph 30 of Meier et al.

With respect to claims 3, 5, 8, 11, 13, 30, 32, 36, and 42 see paragraph 75+ of Meier et al.

With respect to claims 6, 14, and 33 note primary cleaning member (440).

With respect to claim 16 note the first cleaning member (440) and wherein the transfer medium (120) and second cleaning member (444) are removably attached by cartridge (130).

With respect to claims 17, 18, and 41 see again paragraph 75 of Meier et al.

With respect to claims 21, 36, 38, and 43 note the spools (122, 124).

With respect to claim 24 see Figure 17 of Meier et al., for example.

Claims 20, 35, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al. Meier et al. do not specifically teach that the circumference of the first cleaning roller equals the length of the substrate or that the printer consumable/printing medium is disposed of along with the sticky cleaning member. With respect to claim 20 it would have been obvious to one of ordinary skill in the art to match the circumference of the cleaning roller of Meier et al. with the length of the substrate so as to guarantee a fresh cleaning surface to each part of the card while minimizing the overall size of the cleaning roller. With respect to claims

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35 and 54 it would have been obvious to one of ordinary skill in the art through routine experimentation to provide the printer consumable and cleaning structure of Meier et al. with similar useful lives so as to simply reduce the frequency of maintaining the printer with fresh supplies.

Claims 4, 12, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al. in view of Meier et al. (2002/0106229). Meier et al. do not teach a sticky web or belt. Meier et al. ('229) teach a cleaning structure having a sticky web or belt (64). See the Abstract and paragraphs 4, 8, 22, and 26 of Meier et al. ('229). It would have been obvious to one of ordinary skill in the art to provide the cleaning structure of Meier et al. with a sticky web or belt in view of Meier et al. ('229) so as to hold more debris before needing replacement.

Claims 7, 15, 19, 25 - 27, 34, 39, 40, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al. in view of Heno (US 6,408,151). Meier et al. do not teach the cleaning structure of the cartridge directly engaging the substrate, the second roller having a greater diameter than the first roller, the second cleaning roller biasing the first cleaning roller, or the cleaning rollers having linear regions of engagement.

With respect to claims 7, 15, and 34 Heno teaches a replaceable cartridge (10) having cleaning structure (16) directly engaging the substrate. See Figures 2, 6, 11 and column 9 line 35 - column 10 line 30 of Heno, for example. It would have been obvious to one of ordinary skill in the art to provide the cleaning structure in the cartridge of Meier et al. to directly engage the substrate in view of Heno so as to allow replacement of the cleaning structure when dirty.

With respect to claim 19 Heno teaches that the second roller should have a greater diameter than the first roller. See column 8 line 32+ of Heno, for example. It would have been

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obvious to one of ordinary skill in the art to provide the cleaning structure of Meier et al. with a second roller having a greater diameter than the first roller so as to hold more debris.

With respect to claims 25, 26, 39, 40, 44, and 45 Heno teaches resiliently biasing the second roller (14) into the first roller (16). See column 5 line 60 - column 6 line 36 and the paragraph bridging columns 7 and 8 of Heno. It would have been obvious to one of ordinary skill in the art to resiliently bias the second roller into the first roller of Meier et al. in view of Heno so as to accommodate substrates with different thickness. With further respect to claims 26, 40, and 45 Heno teaches leaf springs (34a, 34b) as opposed to compression springs. However, it would have been obvious to one of ordinary skill in the art to provide comparable biasing structure, such as compression springs, to bias the second roller into the first roller.

With respect to claim 27 Heno teaches the engagement regions of the rollers being diametrically opposite each other. See Figure 15 of Heno, for example. It would have been obvious to one of ordinary skill in the art to provide the cleaning structure of Meier et al. with diametrically opposite engagement regions in view of Heno so as to more easily bias the second roller into the first roller and thus the first roller onto the substrate.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al. in view of Adkins et al. (US 5,584,589). Meier et al. do not teach the first cleaning roller (444) carried by the printer frame for vertical movement in slots. Adkins et al. teach a first cleaning roller (91) mounted for vertical movement in slots. See Figure 1, column 3 lines 15 - 19, and column 4 lines 13 - 17. It would have been obvious to one of ordinary skill in the art to mount the first cleaning roller of Meier et al. in vertical slots in view of Adkins et al. so as to allow the first cleaning roller to accommodate substrates of different thickness.

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Claims 46 - 53 are allowed. Meier et al. specifically teach that the cleaning structure can be replaced separately from the consumable transfer media (120). Furthermore, even Heno teaches that the first cleaning roller (16) can be replaced separately from the remainder of the cartridge (10).

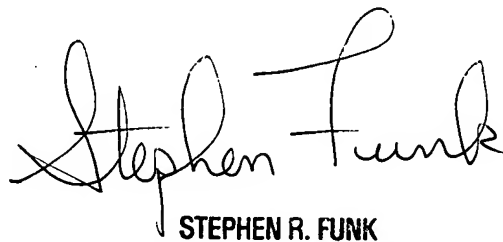
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note, in particular, cleaning roller (21d) of Sawano et al. ('683).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen R. Funk whose telephone number is (571) 272-2164.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Hirshfeld, can be reached at (571) 272-2168.

The fax phone number for ALL official papers is (703) 872-9306. Upon consulting with the examiner *unofficial* papers only may be faxed directly to the examiner at (571) 273-2164.

SRF
October 21, 2004

A handwritten signature in black ink that reads "Stephen Funk". The signature is stylized with a large, looped "S" and a long, horizontal stroke for the "F".

**STEPHEN R. FUNK
PRIMARY EXAMINER**